

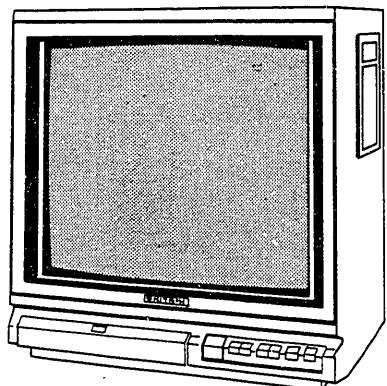


HITACHI

• SERVICE MANUAL

YK

No.933E

**CT2000S
CT2000W**

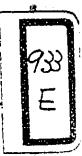
This service manual shows only essential items.
Our complete service manual including "alignment procedure", and "technical information" are issued by manual No. 895.

CAUTION: Before servicing this chassis, it is important that the service technician read the "Safety Precaution" and "Product Safety Notices" in this Service Manual.

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SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT



COMPONENT COLOR TELEVISION

October 1983

YOKOHAMA WORKS

SAFETY PRECAUTIONS

NOTICE: Comply with all cautions and safety related notes located on or inside the cabinet and on the chassis or picture tube.

WARNING: Since the chassis of this receiver is connected to one side of AC power supply during operation, whenever the receiver is plugged in, service should not be attempted by anyone unfamiliar with the precautions necessary when working on this type of receiver.

The following precautions should be observed:

1. Do not install, remove, or handle the picture tube in any manner unless shatterproof goggles are worn. People not so equipped should be kept away while picture tubes are handled. Keep picture tube away from the body while handling.
2. When service is required, an isolation transformer should be inserted between power line and the receiver before any service is performed on a "HOT" chassis receiver.
3. When replacing a chassis in the receiver, all the protective devices must be put back in place, such as barriers, non-metallic knobs, adjustment and compartment cover-shields, isolation resistor-capacitor, etc.
4. When service is required, observe the original lead dress. Extra precaution should be taken to assure correct lead dress in the high voltage circuitry area.
5. Always use the manufacturer's replacement components. Especially critical components as indicated on the circuit diagram should not be replaced by other manufacturer's. Furthermore where a short circuit has occurred, replace those components that indicate evidence of overheating.
6. Before returning a serviced receiver to the customer, the service technician must thoroughly test the unit to be certain that it is completely safe to operate without danger of electrical shock, and be sure that no protective device built into the receiver by the manufacturer has become defective, or inadvertently defeated during servicing.

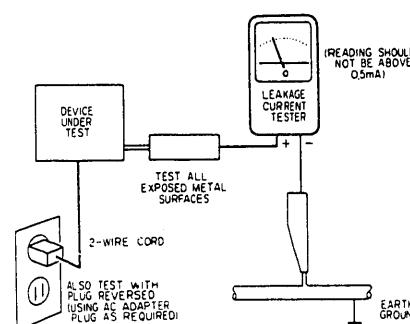
Therefore, the following checks should be performed for the continued protection of the customer and service technician.

Leakage Current Cold Check

With the AC plug removed from the 120V AC 60Hz source, place a jumper across the two plug prongs. Turn the AC power switch on. Using an insulation tester (DC 500V), connect one lead to the jumpered AC plug and touch the other lead to each exposed metal part (antennas, screwheads, metal overlays, control shafts, etc.), particularly any exposed metal part having a return path to the chassis. Exposed metal parts having a return path to the chassis should have a minimum resistor reading of 0.3Ω and a maximum resistor reading of 5Ω . Any resistor value below or above this range indicates an abnormality which requires corrective action. Exposed metal parts not having a return path to the chassis will indicate an open circuit.

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E**Leakage Current Hot Check**

Plug the AC line cord directly into a 120V AC 60Hz outlet (do not use an isolation transformer for this check). Turn the AC power switch on. Using a "leakage Current Tester (Simpson Model 229 equivalent)", measure for current from all exposed metal parts of the cabinet (antennas, screwheads, metal overlays, control shaft, etc.), particularly any exposed metal part having a return path to the chassis, to a known earth ground (water pipe, conduit, etc.). Any current measured must not exceed 0.5mA.

**AC Leakage Test**

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE RECEIVER TO THE CUSTOMER.

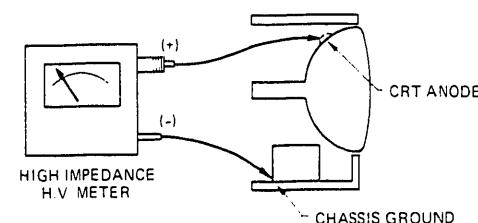
High Voltage

This receiver is provided with a hold down circuit for clearly indicating that voltage has increased in excess of a predetermined value. Comply with all notes described in this Service Manual regarding this hold down circuit when servicing, so that this hold down circuit may correctly be operated.

Serviceman warning

With minimum Brightness and Picture, operating high voltage in this receiver is lower than 31.0KV. In case any component having influence on high voltage is replaced, confirm that high voltage with minimum Brightness and Picture is lower than 31.0KV. To measure H.V. use a high impedance H.V. meter. Connect (-) to chassis earth and (+) to the CRT anode button. (See the following connection diagram).

NOTE: Turn power switch off without fail before the connection with Anode button is made.

**X-radiation**

TUBE: The primary source of X radiation in this receiver is the picture tube. The tube utilized for the above mentioned function in this chassis is specially constructed to limit X radiation emissions.

For continued X radiation protection, the replacement tube must be the same type as the original, HITACHI approved type.

When trouble shooting and making test measurements in a receiver with a problem of excessive high voltage, avoid being unnecessarily close to the picture tube and the high voltage component.

Do not operate the chassis longer than is necessary to locate the cause excessive voltage.

PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in HITACHI television receiver have special safety related characteristics. These are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the HITACHI recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, X-radiation, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current HITACHI Service Manual. A subscription to, or additional copies of, HITACHI Service Manual may be obtained at a nominal charge from HITACHI SALES CORPORATION.

TECHNICAL SPECIFICATIONS

ANTENNA INPUT IMPEDANCE	300Ω, 75Ω	CONVERGENCE	Self convergence
CHANNEL COVERAGE		FOCUS	Electrostatic
VHF	2 ~ 13	SOUND OUTPUT	5W x 2
UHF	14 ~ 83		
CATV	A-5 ~ A-1	DIMENSIONS	
	A ~ W	W	51.0 cm
	W + 1 ~ W + 28	H	47.5 cm
CHANNEL INDICATOR	DIGITAL/ON SCREEN	D	51.0 cm
INTERMEDIATE FREQUENCY		WEIGHT	Appr. 23.5 kg
Picture I-F Carrier	45.75 MHz		
Sound I-F Carrier	41.25 MHz		
Sound I-F	4.5 MHz		
POWER INPUT	AC120V, 60 Hz		
POWER RATING	140W		

TECHNICAL CAUTIONS

[CHECK OF HIGH VOLTAGE HOLD DOWN CIRCUIT]

Checking of the high voltage hold down circuit operation

1. Turn the switch of the set OFF.
2. Connect a high voltage voltmeter between the CRT anode and the chassis ground (K3) as shown in Fig. 1.
3. Set the AC input voltage to 120V±3V.
4. Set the Brightness and Picture controls to maximum.
5. Connect Equipment - A as shown in Fig. 2. Be sure that the control knob of Equipment - A is rotated fully counterclockwise.
6. Slowly rotate the control knob of Equipment - A clockwise and confirm that picture on the screen disappears at the indication of high voltage voltmeter less than 31.0kV.
7. Turn the set OFF, and disconnect Equipment - A and high voltage voltmeter.

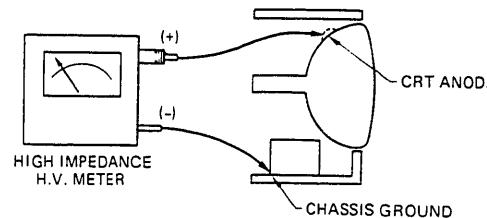


Fig. 1 Connection of H.V. Meter

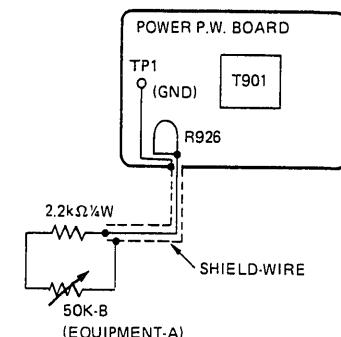
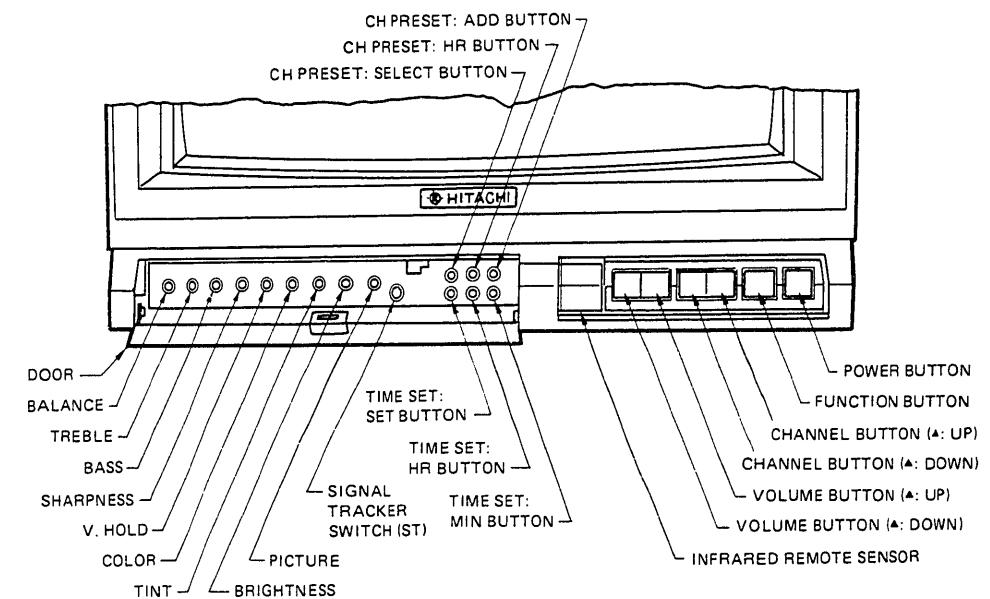
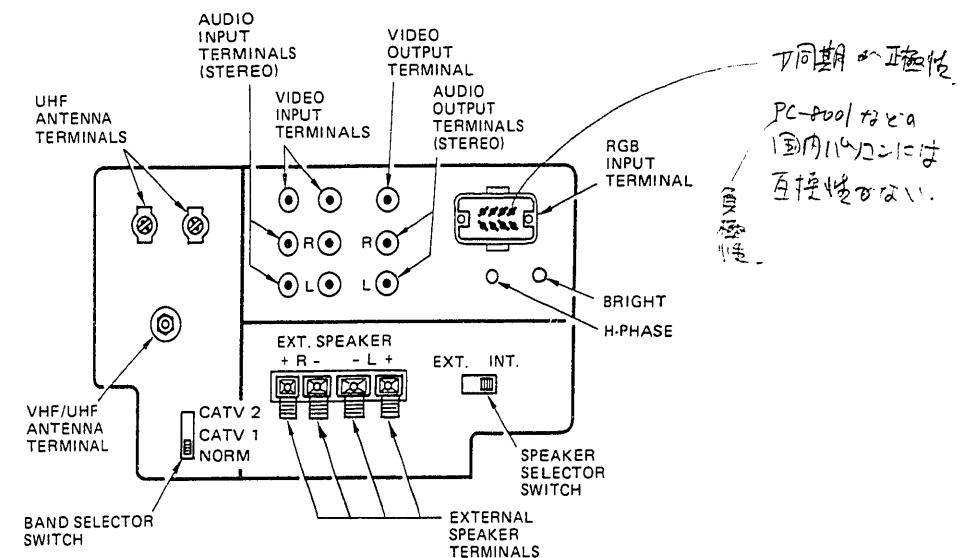


Fig. 2

CONTROLS



BACK PANNEL TERMINALS



OPERATING SUMMARY

1. CHANNEL PRESETTING

A special programming circuit in the tuning system allows you to preset into the receiver's memory those channels you prefer to watch. Then, by pressing the CHANNEL BUTTON UP side (\blacktriangle) or DOWN side (\blacktriangledown), the tuner will advance directly to the next preset channel automatically skipping the unwanted ones. VHF 2-13 channels have been preset at the factory. To erase unwanted channels from the memory or to additional channels available in your area, follow the instructions below in the exact order shown.

1. ELIMINATING UNWANTED CHANNELS -

CHANNEL BUTTON **SELECT BUTTON**
ERASE BUTTON

- (1) Press the CHANNEL BUTTON (\blacktriangle : UP or \blacktriangledown : DOWN) to select the unwanted channel.
- (2) Press the ERASE BUTTON while pressing the SELECT BUTTON in the door, and the channel is erased from the memory. When you press the SELECT BUTTON at this time, the time indication at the lower right side on the screen changes to "P" and "P" disappears by pressing the ERASE BUTTON. This means that the memory storage mode (indicated by "P") has changed to the memory erase mode ("P" disappears). (See Fig. 3 and Fig. 4)
- (3) Repeat item 1 and 2 to erase the memory of other unwanted channels.

2. ADDING DESIRED CHANNELS -

CHANNEL BUTTON **SELECT BUTTON**
ADD BUTTON

- (1) Press the CHANNEL BUTTON (\blacktriangle : UP or \blacktriangledown : DOWN) to tune to the desired channel. When you tune the channel using CHANNEL BUTTON, press the CHANNEL BUTTON while pressing the SELECT BUTTON. At this time, the time indication disappears and "P" is not also displayed.
- (2) Press the ADD BUTTON while pressing the SELECT BUTTON, and the channel is stored in memory. "P" is indicated at this time. (See Fig. 3 and Fig. 4)
- (3) Repeat item 1 and 2 to store other channels in memory.

Note: 1. When all channels have been erased, channels cannot be changed by pressing the CHANNEL BUTTON UP (\blacktriangle) or DOWN (\blacktriangledown). In this case, press the CHANNEL BUTTON while pressing the SELECT BUTTON.
2. The FUNCTION BUTTON (for selecting external VCR, Video Disc Player or Personal Computer) can not be stored in memory.

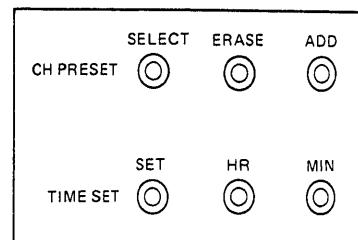


Fig. 3

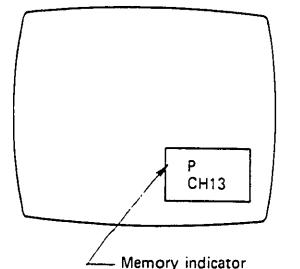


Fig. 4

2. TIME SETTING

Your TV is equipped with a clock circuit and can display the time for your convenience. To set the correct time on your TV, operate as follows.

1. SETTING THE HOUR -

SET BUTTON **HR BUTTON**

Push the HR BUTTON while pressing the SET BUTTON until the time display on the screen shows the correct hour.

2. SETTING THE MINUTE -

SET BUTTON **MIN BUTTON**

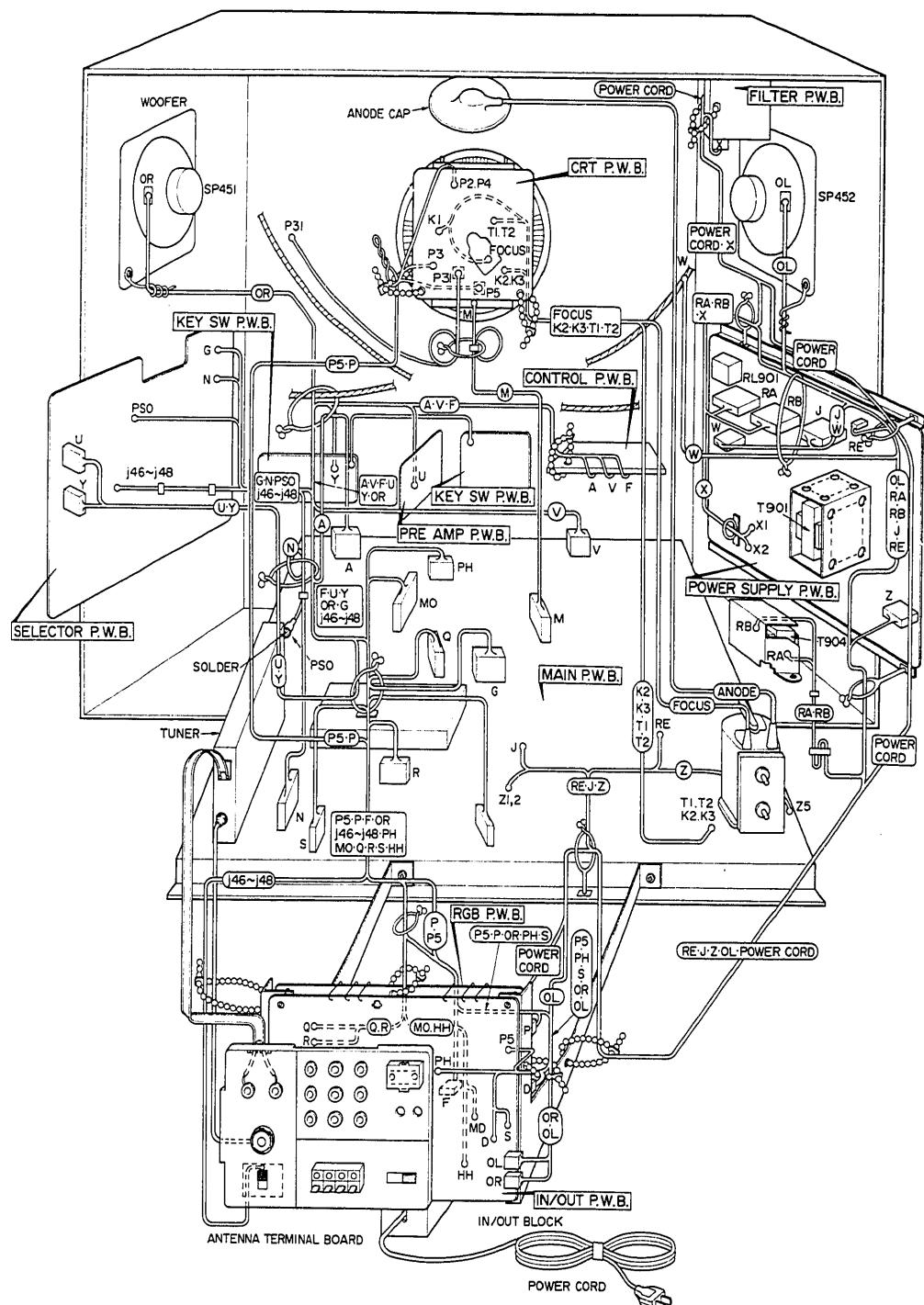
Push the MIN BUTTON while pressing the SET BUTTON until the time display on the screen shows the correct minute.

- * When pressing the SET BUTTON, the time is displayed at the right lower side of the screen automatically.
- * When you have finished time adjustment, the time display disappears after approx. 4 seconds.
- * The clock starts operating just after the SET BUTTON is released. When you release the SET BUTTON simultaneously with a time signal, the clock starts from 0 second.

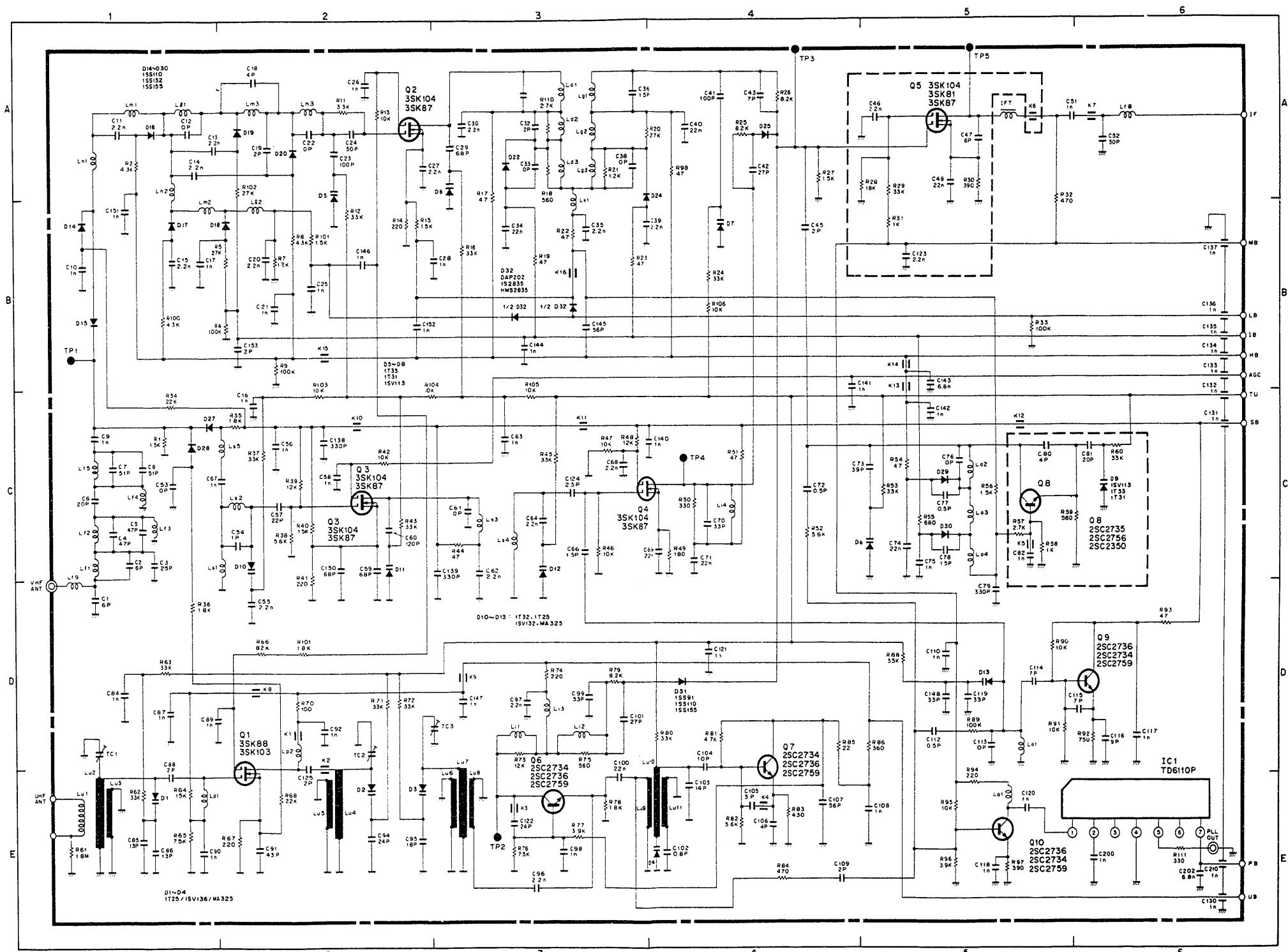
- Note:**
1. If the time display does not appear on the screen the power to the receiver has been interrupted (power failure, the receiver has been unplugged) and the clock must be reset.
 2. When the power cord is unplugged, the clock is stopped. It is better that the power cord is not unplugged except you are going out for along time or not using the set for a period of time.
 3. When you use the set in an area with a power frequency other than 60 Hz, the time display will not operate correctly.

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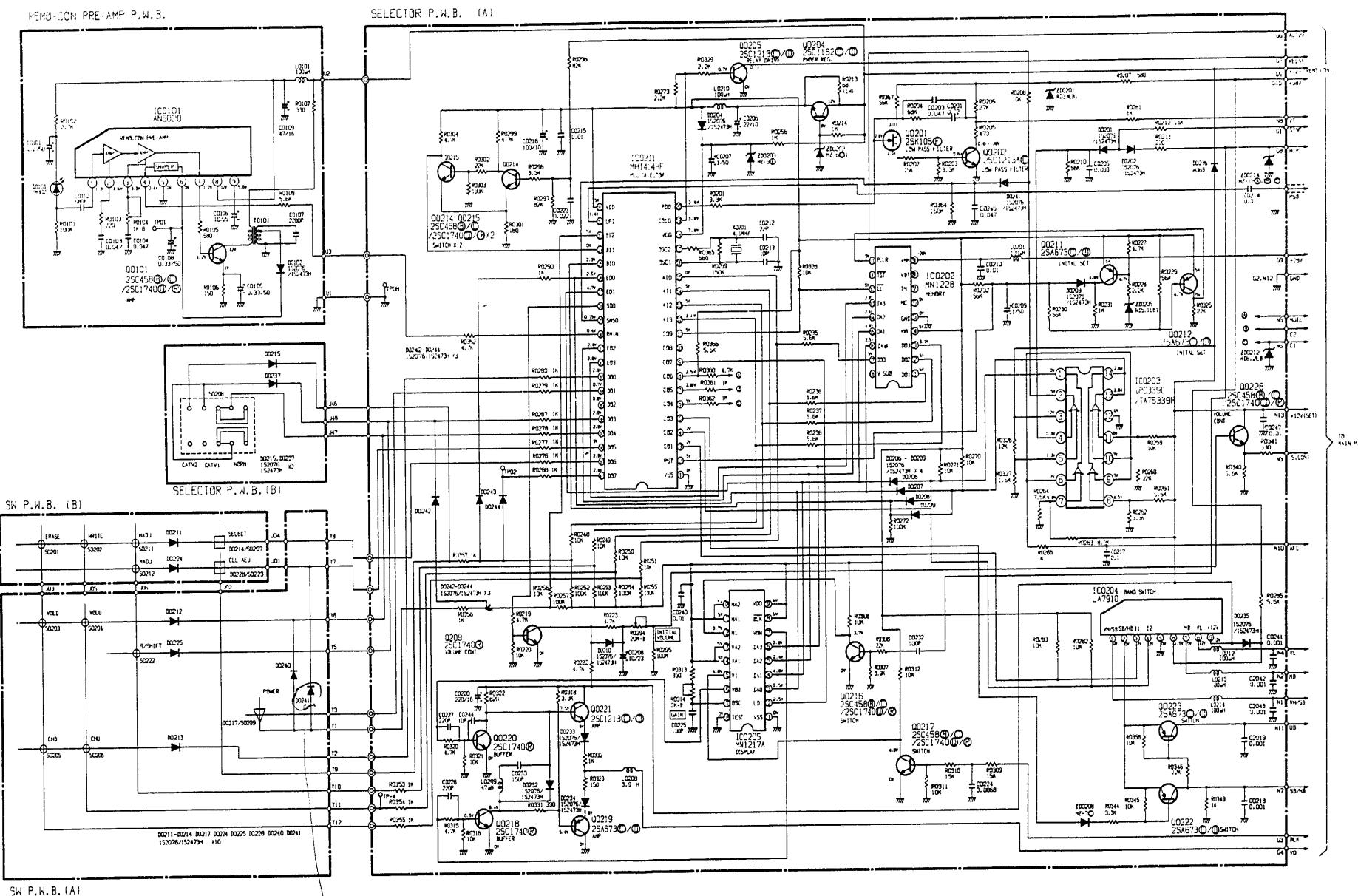
WIRING DIAGRAM



TUNER CIRCUIT DIAGRAM (ET-449)

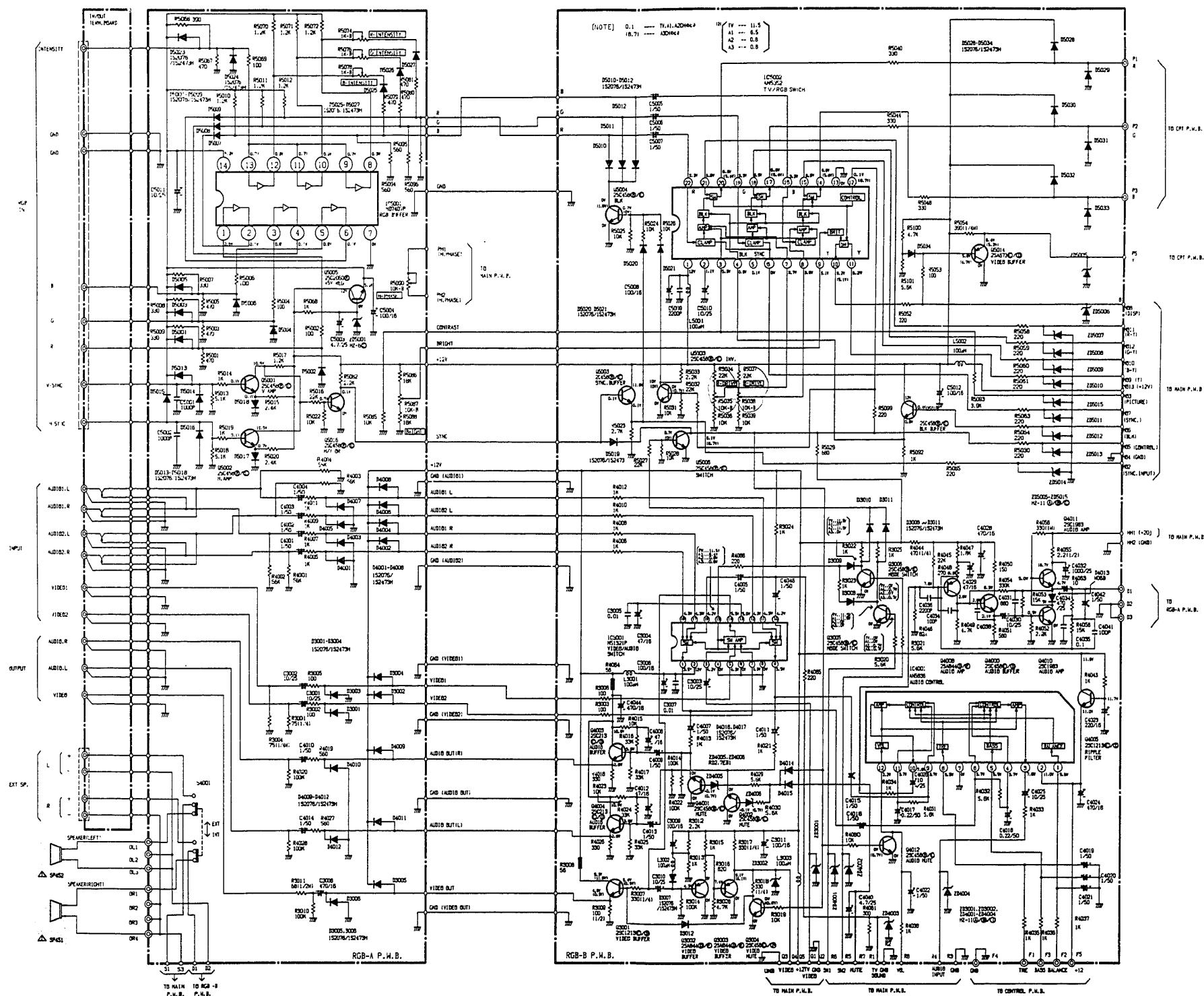


PROGRAM SELECTOR CIRCUIT (CT2000S/CT2000W)



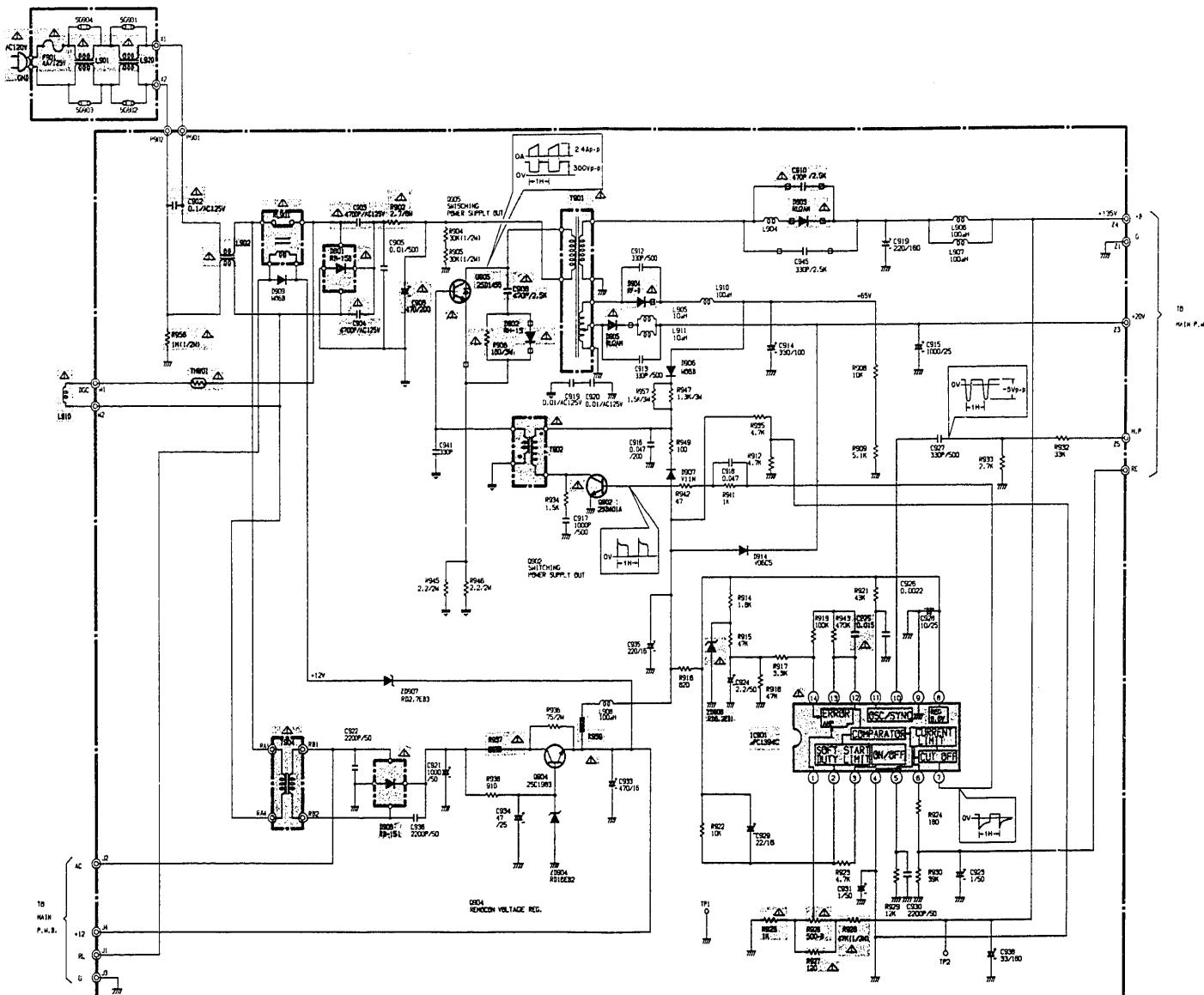
二回路付記。6047用に付記

R.G.B. CIRCUIT DIAGRAM (CT2000S/CT2000W)



POWER CIRCUIT DIAGRAM (CT2000S/CT2000W)

PRODUCT SAFETY NOTE: Components marked with a Δ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

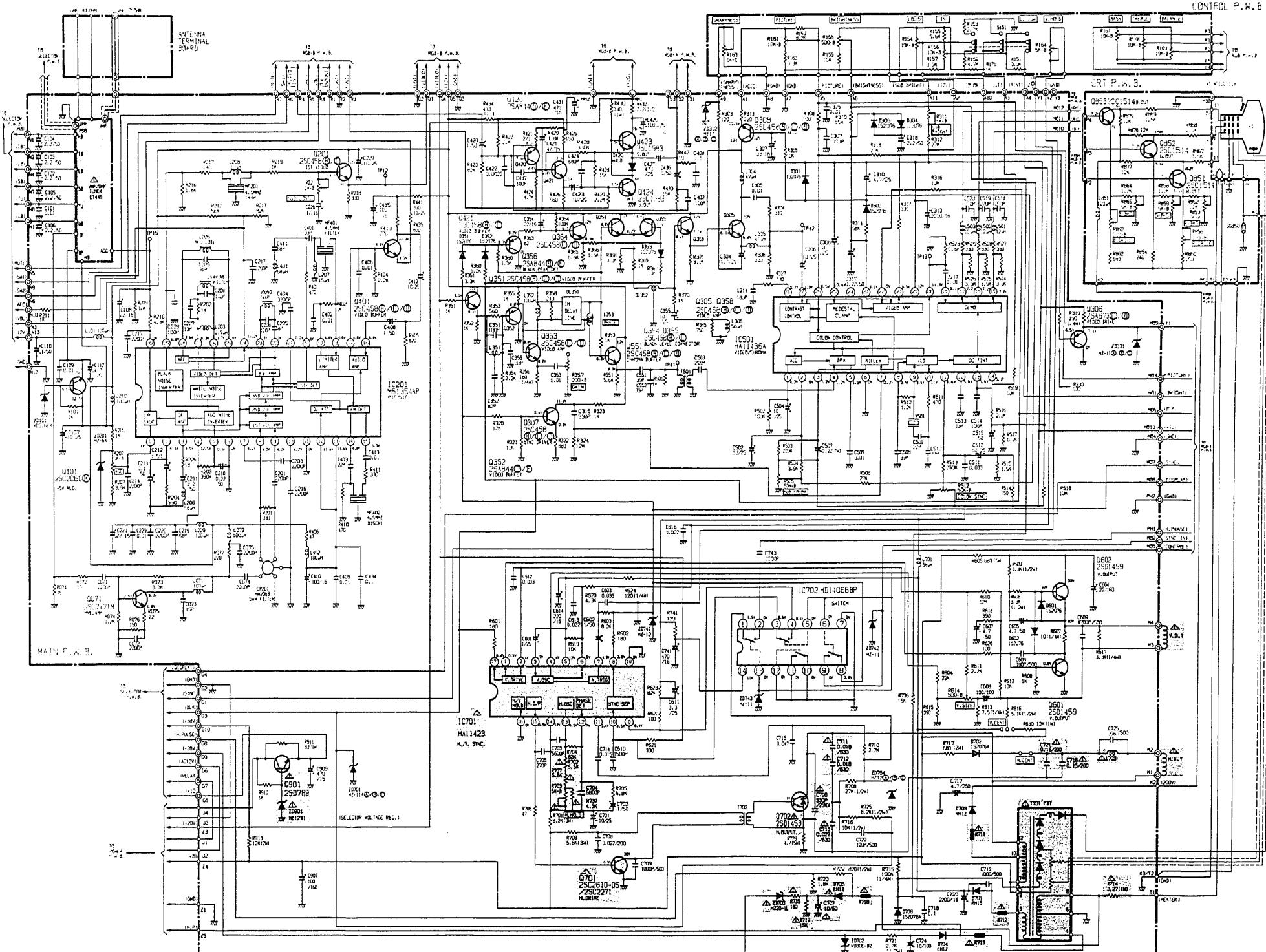


• Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.

• All DC voltage to be measured with a tester (100k Ω /V).

Voltage taken on a complex color bar signal including a standard color bar signal.

MAIN CIRCUIT DIAGRAM (CT2000S/CT2000W)



PRODUCT SAFETY NOTE: Components marked with a and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.
- All DC voltage to be measured with a tester (100kΩ/V).
- Voltage taken on a complex color bar signal including a standard color bar signal.

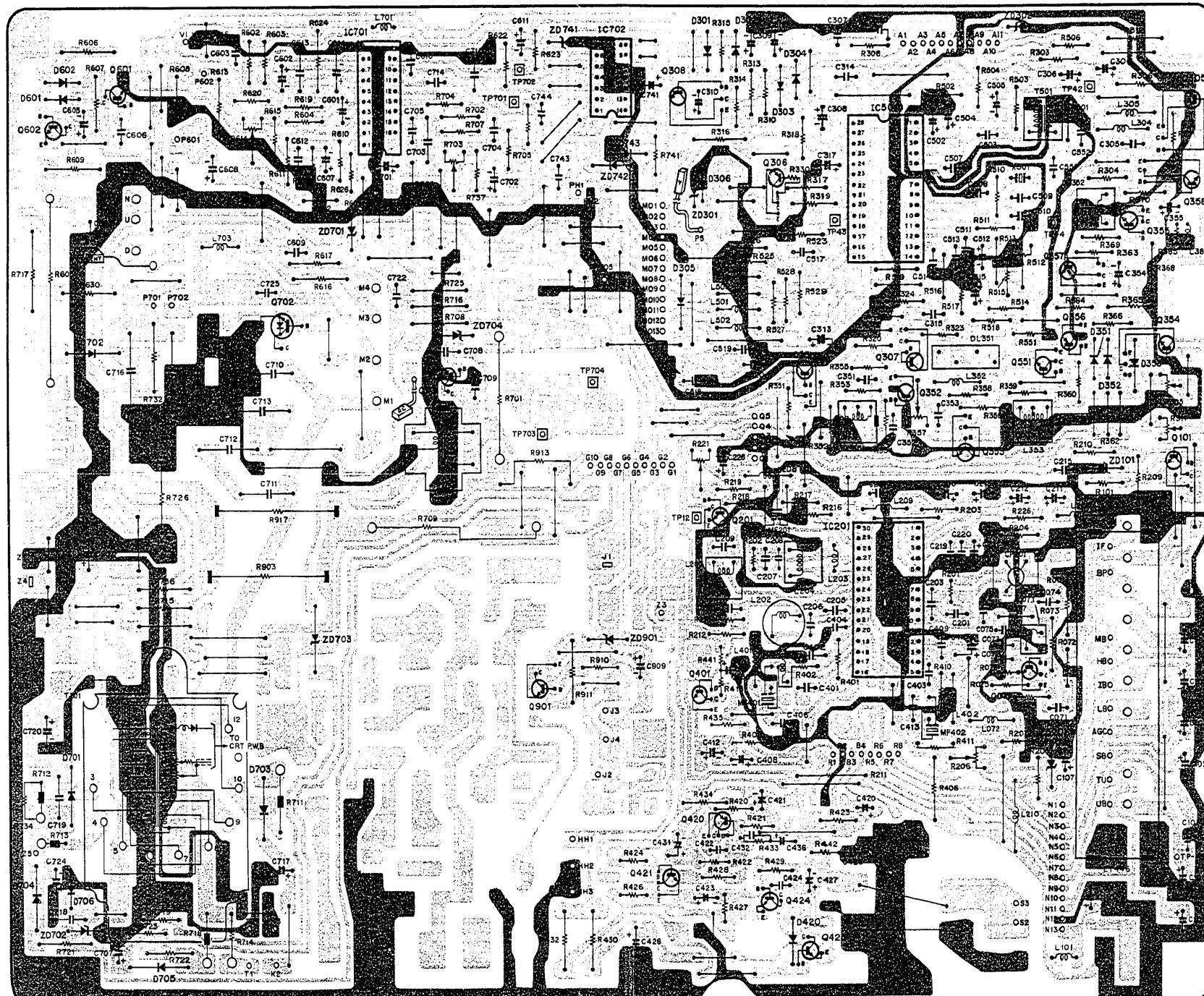
CT2000S
CT2000W

PRINTED WIRING BOARD

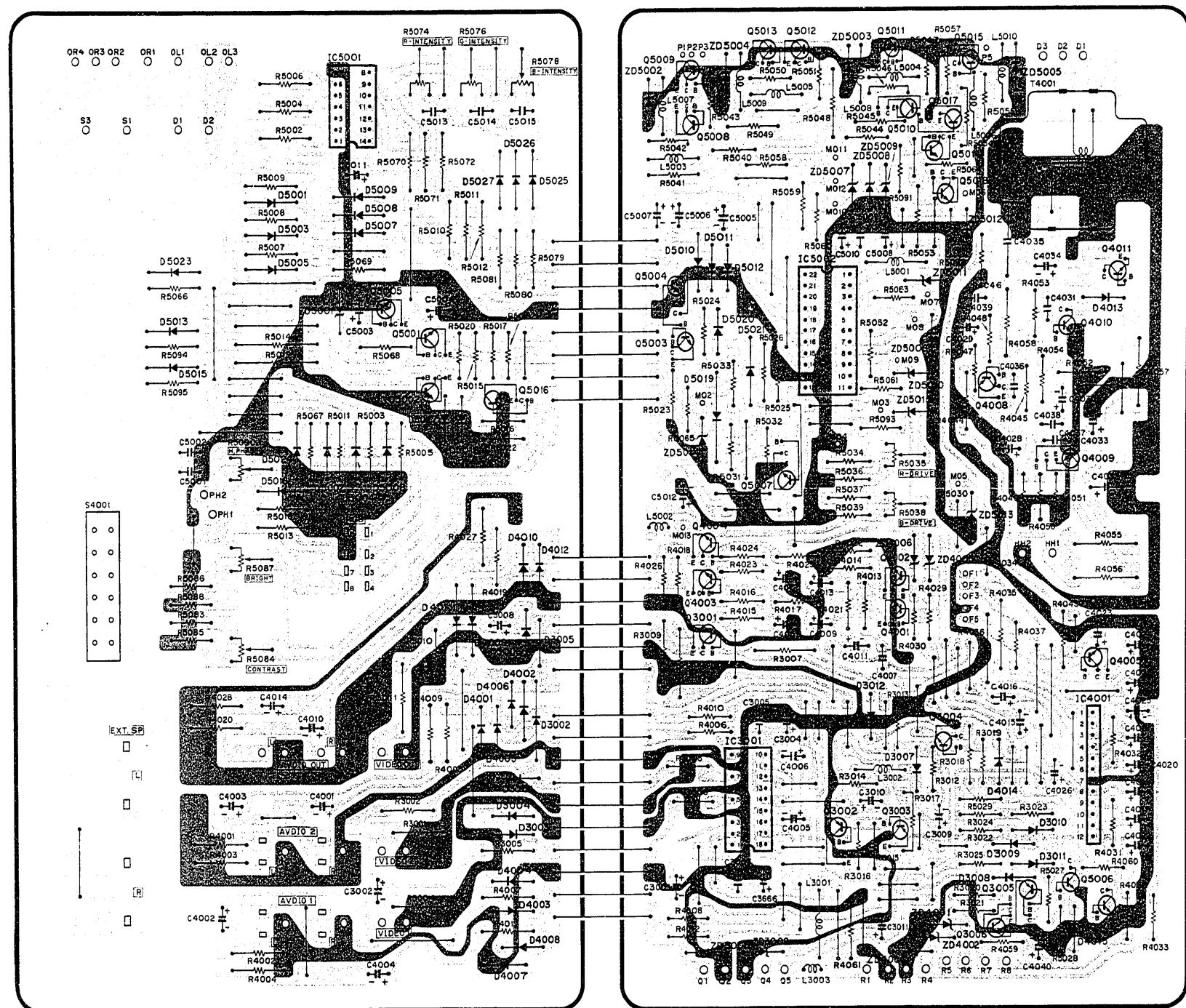
..... +B PATTERN

..... GROUND PATTERN

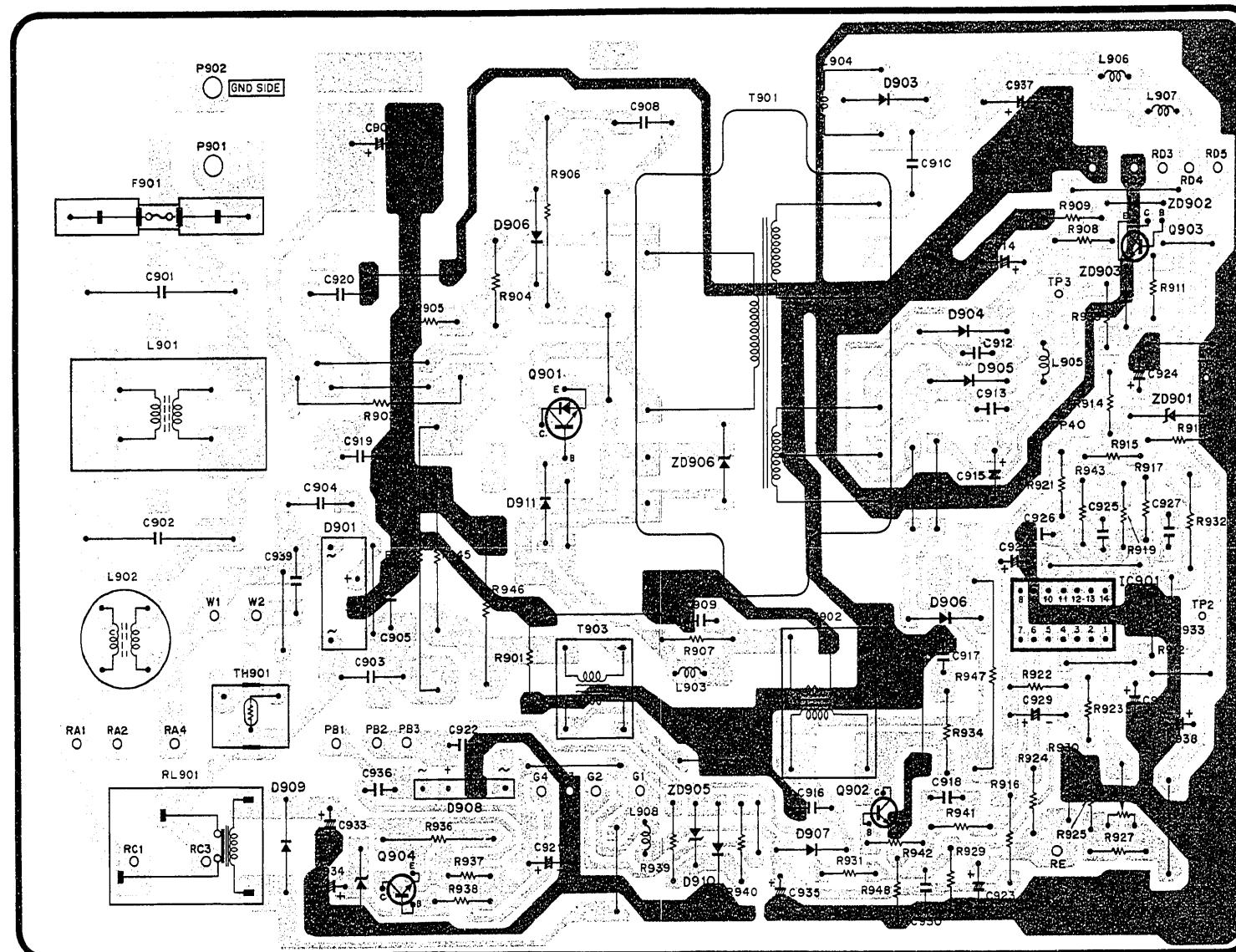
MAIN P.W. BOARD



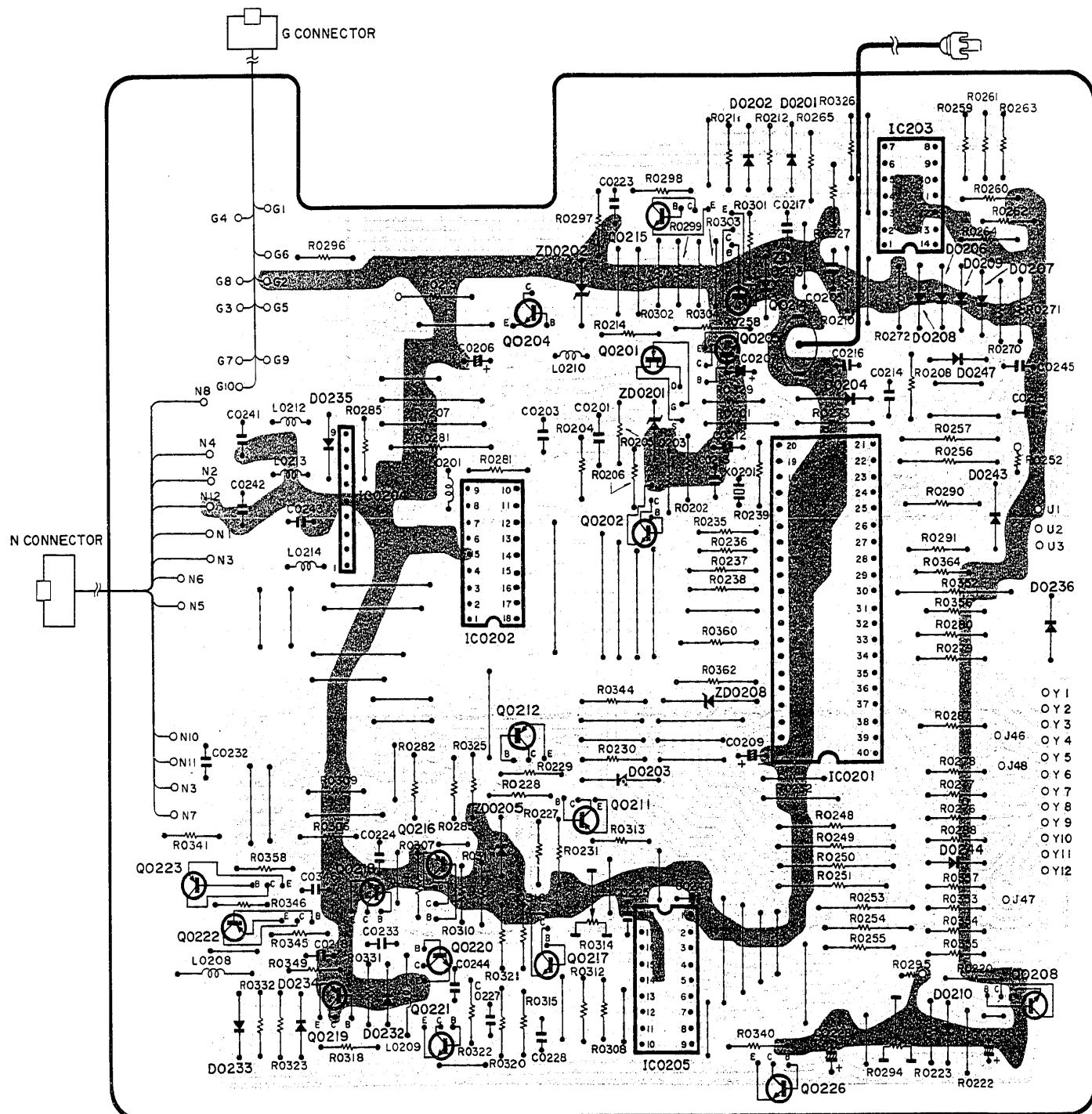
R.G.B. P.W. BOARD



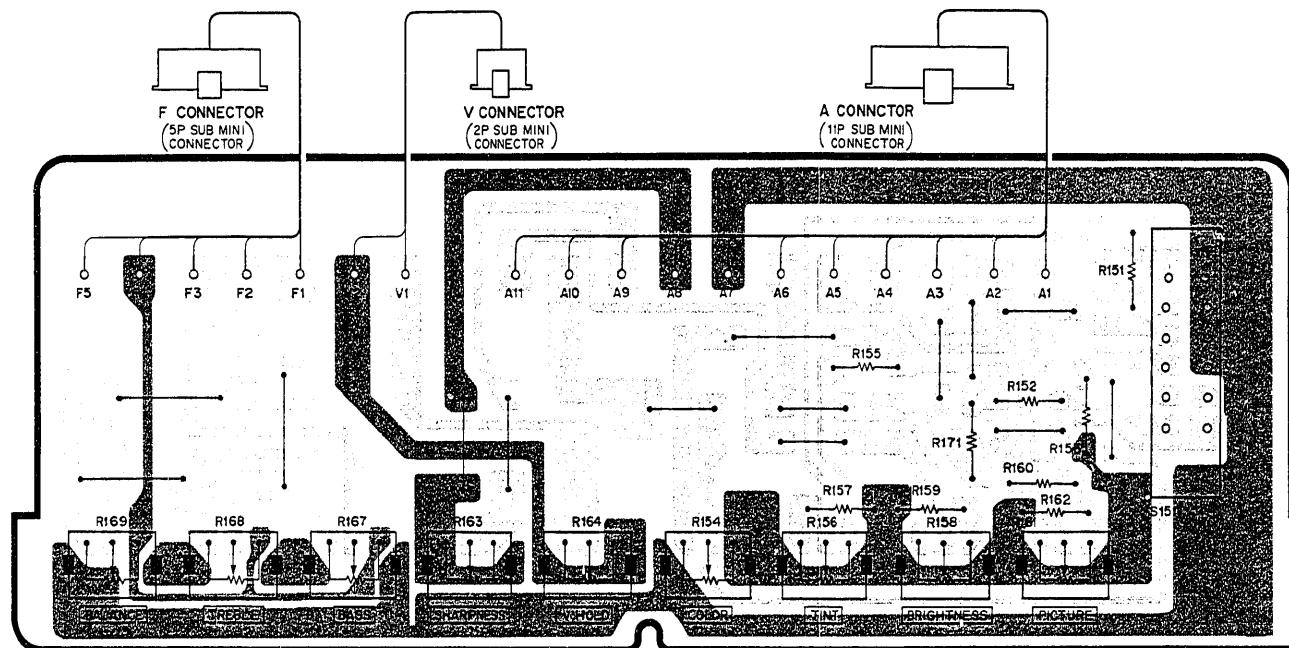
POWER P.W. BOARD



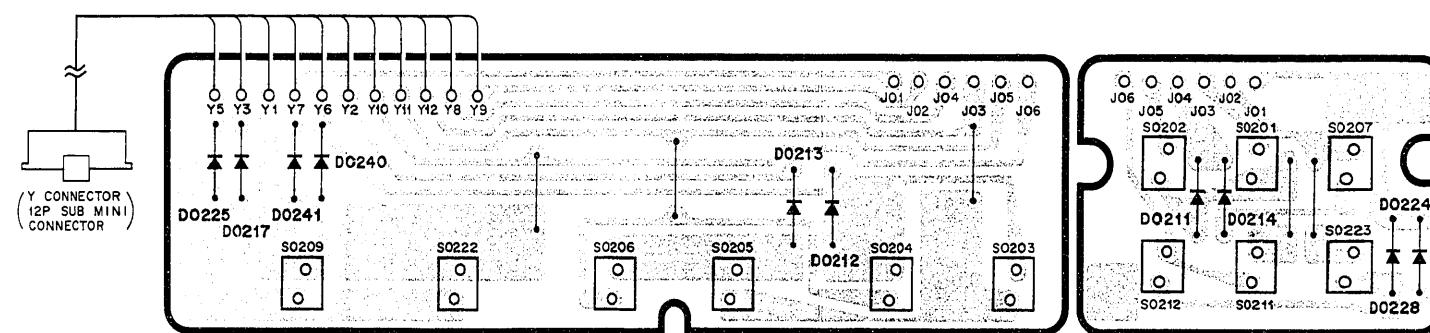
PROGRAM SELECTOR P.W. BOARD



CONTROL P.W. BOARD

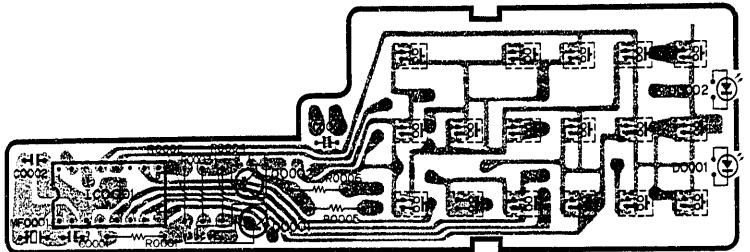


KEY SWITCH P.W. BOARD

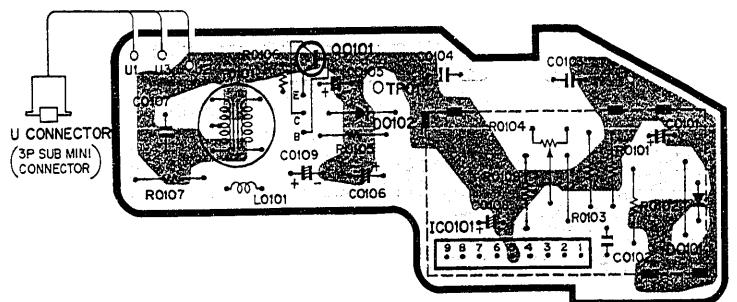


**CT2000S
CT2000W**

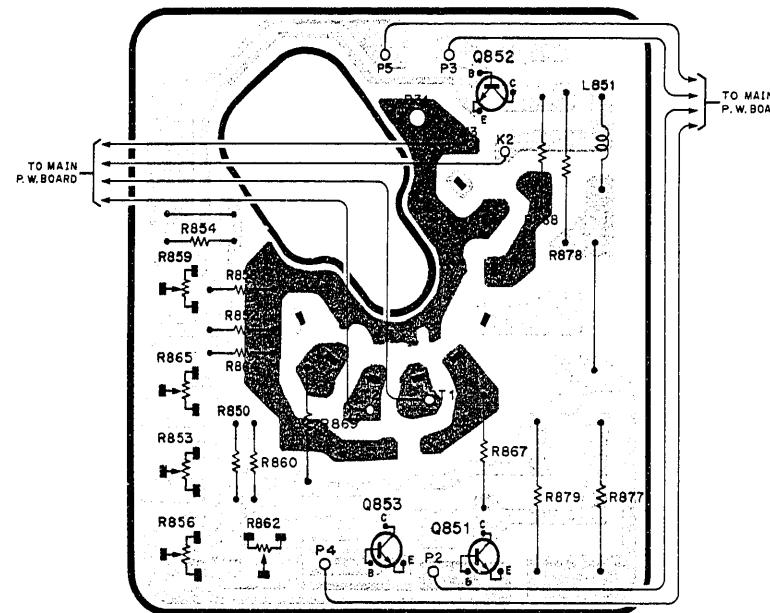
REMOTE CONTROL TRANSMITTER P.W. BOARD



REMOTE CONTROL RECEIVER P.W. BOARD



C.R.T. P.W. BOARD



REPLACEMENT PARTS LIST

PRODUCT SAFETY NOTE: Components marked with a Δ have special characteristics important to safety. Before replacing any of these components, read carefully, the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

ABBREVIATIONS: Capacitors CD: Ceramic disk, PF: Polyester film, EL: Electrolytic, PP: Polypropylene,
PR: Paper, TA: Tantalum
Resistors CF: Carbon film, CC: Carbon composition, OMF: Metal oxide film,
VR: Varialbe resistor, WW: Wire wound, FR: Fuse resistor

SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
CAPACITORS					
C0001	0248684	CD 100PF $\pm 5\%$ 50V	C071	0244105	CD 2200PF $\pm 10\%$ 50V
C0002	0248684	CD 100PF $\pm 5\%$ 50V	C072	0244105	CD 2200PF $\pm 10\%$ 50V
C0003	025301I	EL 220MF 6.3V	C073	0246444	CD 15PF $\pm 5\%$ 50V
C0101	0252817	EL 2.2MF 50V	C074	0244105	CD 2200PF $\pm 10\%$ 50V
C0102	0244117	CD 68PF $\pm 10\%$ 50V	C075	0244105	CD 2200PF $\pm 10\%$ 50V
C0103	0277021	PF 0.047MF $\pm 10\%$ 50V	C101	0277013	PF 0.01MF $\pm 10\%$ 50V
C0104	0277021	PF 0.047MF $\pm 10\%$ 50V	C102	0253083	EL 2.2MF 50V
C0105	0252807	EL 0.33MF 50V	C103	0253083	EL 2.2MF 50V
C0106	0252621	EL 10MF 25V	C104	0253083	EL 2.2MF 50V
C0107	0299990	PP 2200PF $\pm 10\%$ 100V	C105	0253083	EL 2.2MF 50V
C0108	0252807	EL 0.33MF 50V	C106	0253083	EL 2.2MF 50V
C0109	0252525	EL 47MF 16V	C107	0253066	EL 10MF 25V
C0201	0277029	PF 0.22MF $\pm 10\%$ 50V	C108	0253047	EL 22MF 16V
C0203	0277021	PF 0.047MF $\pm 10\%$ 50V	C109	0277013	PF 0.01MF $\pm 10\%$ 50V
C0205	0277019	PF 0.033MF $\pm 10\%$ 50V	C110	0253082	EL 1MF 50V
C0206	0253031	EL 220MF 10V	C112	0253065	EL 4.7MF 25V
C0207	0253082	EL 1MF 50V	C201	0244105	CD 2200PF $\pm 10\%$ 50V
C0208	0253065	EL 4.7MF 25V	C203	0244105	CD 2200PF $\pm 10\%$ 50V
C0209	0253082	EL 1MF 50V	C205	0246418	CD 8PF $\pm 0.25PF$ 50V
C0210	0277013	PF 0.01MF $\pm 10\%$ 50V	C206	0246466	CD 120PF $\pm 5\%$ 50V
C0212	0246448	CD 22PF $\pm 5\%$ 50V	C207	0246443	CD 13PF $\pm 5\%$ 50V
C0213	0246420	CD 10PF $\pm 0.5\%$ 50V	C208	0246464	CD 100PF $\pm 5\%$ 50V
C0214	0277013	PF 0.01MF $\pm 10\%$ 50V	C209	0246463	CD 91PF $\pm 5\%$ 50V
C0215	0277013	PF 0.01MF $\pm 10\%$ 50V	C210	0252809	EL 0.22MF 50V
C0216	0253030	EL 100MF 10V	C211	0253083	EL 2.2MF 50V
C0217	0277025	PF 0.1MF $\pm 10\%$ 200V	C212	0253082	EL 1MF 50V
C0218	0277001	PF 1000PF $\pm 10\%$ 50V	C213	0252805	EL 0.1MF 50V
C0219	0277001	PF 1000PF $\pm 10\%$ 50V	C214	0244105	CD 2200PF $\pm 10\%$ 50V
C0223	0277017	PF 0.122MF $\pm 10\%$ 50V	C215	0244105	CD 2200PF $\pm 10\%$ 50V
C0224	0277011	PF 6800 PF $\pm 10\%$ 50V	C216	0244105	CD 2200PF $\pm 10\%$ 50V
C0225	0248684	CD 100PF $\pm 5\%$ 50V	C217	0244105	CD 2200PF $\pm 10\%$ 50V
C0226	0248692	CD 220PF $\pm 5\%$ 50V	C219	0244105	CD 2200PF $\pm 10\%$ 50V
C0227	0248692	CD 220PF $\pm 5\%$ 50V	C220	0248680	CD 68PF $\pm 5\%$ 50V
C0228	0253051	EL 220MF 16V	C221	0253047	EL 22MF 16V
C0232	0248684	CD 100PF $\pm 5\%$ 50V	C227	0253066	EL 10MF 25V
C0233	0248688	CD 150PF $\pm 5\%$ 50V	C228	0248684	CD 100MF $\pm 5\%$ 50V
C0240	0277013	PF 0.01MF $\pm 10\%$ 50V	C229	0277013	PF 0.01MF $\pm 10\%$ 50V
C0241	0277001	PF 1000PF $\pm 10\%$ 50V	C3001	0253066	EL 10MF 25V
C0242	0277001	PF 1000PF $\pm 10\%$ 50V	C3002	0253066	EL 10MF 25V
C0243	0277001	PF 1000PF $\pm 10\%$ 50V	C3003	0253066	EL 10MF 25V
C0244	0248640	CD 150PF $\pm 0.25PF$ 50V	C3004	0253069	EL 47MF 25V
C0245	0277021	PF 0.047MF $\pm 10\%$ 50V	C3005	0276823	PF 0.01MF $\pm 5\%$ 50V

SYMBOL NO.	PART NO.	DESCRIPTION
C3006	0253050	EL 100MF 16V
C3007	0276823	PF 0.01MF +-5% 50V
C3008	0253053	EL 470MF 16V
C3009	0253050	EL 100MF 16V
C3010	0253066	EL 10MF 25V
C3011	0253050	EL 100MF 16V
C304	0253065	EL 4.7MF 25V
C305	0277013	PF 0.01MF +-10% 50V
C306	0253060	EL 10MF 25V
C307	0244139	CD 1000PF +-10% 50V
C308	0253066	EL 10MF 25V
C309	0253048	EL 33MF 16V
C310	0253065	EL 4.7MF 25V
C313	0253055	EL 220MF 16V
C314	0248690	CD 180PF +-5% 50V
C315	0244113	CD 330PF +-10% 50V
C317	0252606	EL 0.22MF 50V
C318	0253083	EL 2.2MF 50V
C320	0277013	PF 0.01MF +-10% 50V
C351	0248684	CD 100PF +-5% 50V
C352	0248682	CD 82PF +-5% 50V
C353	0277013	PF 0.01MF +-10% 50V
C354	0253047	EL 22MF 16V
C355	0253066	EL 10MF 25V
C356	0248672	CD 33PF +-5% 50V
C4001	0253082	EL 1MF 50V
C4002	0253082	EL 1MF 50V
C4003	0253082	EL 1MF 50V
C4004	0253082	EL 1MF 50V
C4005	0253082	EL 1MF 50V
C4006	0253082	EL 1MF 50V
C4007	0253082	EL 1MF 50V
C4008	0253049	EL 47MF 16V
C4009	0253082	EL 1MF 50V
C401	0248672	CD 33PF +-5% 50V
C4010	0253082	EL 1MF 50V
C4011	0253082	EL 1MF 50V
C4012	0253049	EL 47MF 16V
C4013	0253082	EL 1MF 50V
C4014	0253082	EL 1MF 50V
C4015	0253082	EL 1MF 50V
C4016	0253082	EL 1MF 50V
C4017	0252806	EL 0.22MF 50V
C4018	0252806	EL 0.22MF 50V
C4019	0253082	EL 1MF 50V
C402	0244171	CD 0.01MF +-80-20% 50V
C4020	0253082	EL 1MF 50V
C4021	0253082	EL 1MF 50V
C4022	0253082	EL 1MF 50V
C4023	0253053	EL 470MF 16V
C4024	0253053	EL 47MF 16V
C4025	0253066	EL 10MF 25V
C4026	0253066	EL 10MF 25V
C4028	0253053	EL 470MF 16V
C4029	0253049	EL 47MF 16V
C403	0246448	CD 22PF +-5% 50V
C4030	0253066	EL 10MF 25V
C4031	0244117	CD 680PF +-10% 50V
C4032	0253460	EL 100MF 16V
C4034	0253455	EL 4.7MF 16V
C4035	0277893	PF 0.01MF +-10% 200V
C4036	0244105	CD 2200PF +-10% 50V
C404	0244107	CD 3300PF +-10% 50V
C4040	0253065	EL 4.7MF 25V
C4041	0247854	CD 100PF 500V
C4046	0244171	CD 0.01MF +-80-20% 50V
C408	0253082	EL 1MF 50V
C409	0244171	CD 0.01MF +-80-20% 50V
C410	0253050	EL 100MF 16V
C411	0248680	CD 6PF +-5% 50V
C412	0253066	EL 10MF 25V
C413	0276823	PF 0.01MF +-5% 50V
C420	0253082	EL 1MF 50V
C421	0253049	EL 47MF 16V
C422	0244105	CD 2200PF +-10% 50V
C423	0253066	EL 10MF 25V
C424	0243511	CD 680PF +-5% 50V
C425	0258584	EL 10MF 160V
C426	0259857	EL 100MF 160V
C427	0257537	EL 4.7MF 160V
C431	0253050	EL 100MF 16V
C434	0277025	PF 0.01MF +-10% 200V
C435	0253050	EL 100MF 16V
C5001	0244139	CD 1000PF +-10% 50V
C5002	0244139	CD 1000PF +-10% 50V
C5003	0253065	EL 4.7MF 25V
C5004	0253050	EL 100MF 16V
C5005	0253082	EL 1MF 50V
C5006	0253082	EL 1MF 50V
C5007	0253082	EL 1MF 50V
C5008	0253050	EL 100MF 16V
C5009	0244105	CD 2200PF +-10% 50V
C5010	0253066	EL 10MF 25V
C5011	0253066	EL 10MF 25V
C5012	0253050	EL 100MF 16V
C502	0253066	EL 10MF 25V
C503	0248692	CD 22PF +-5% 50V
C504	0253066	EL 10MF 25V
C505	0252800	EL 0.22MF 50V
C507	0277013	PF 0.01MF +-10% 50V

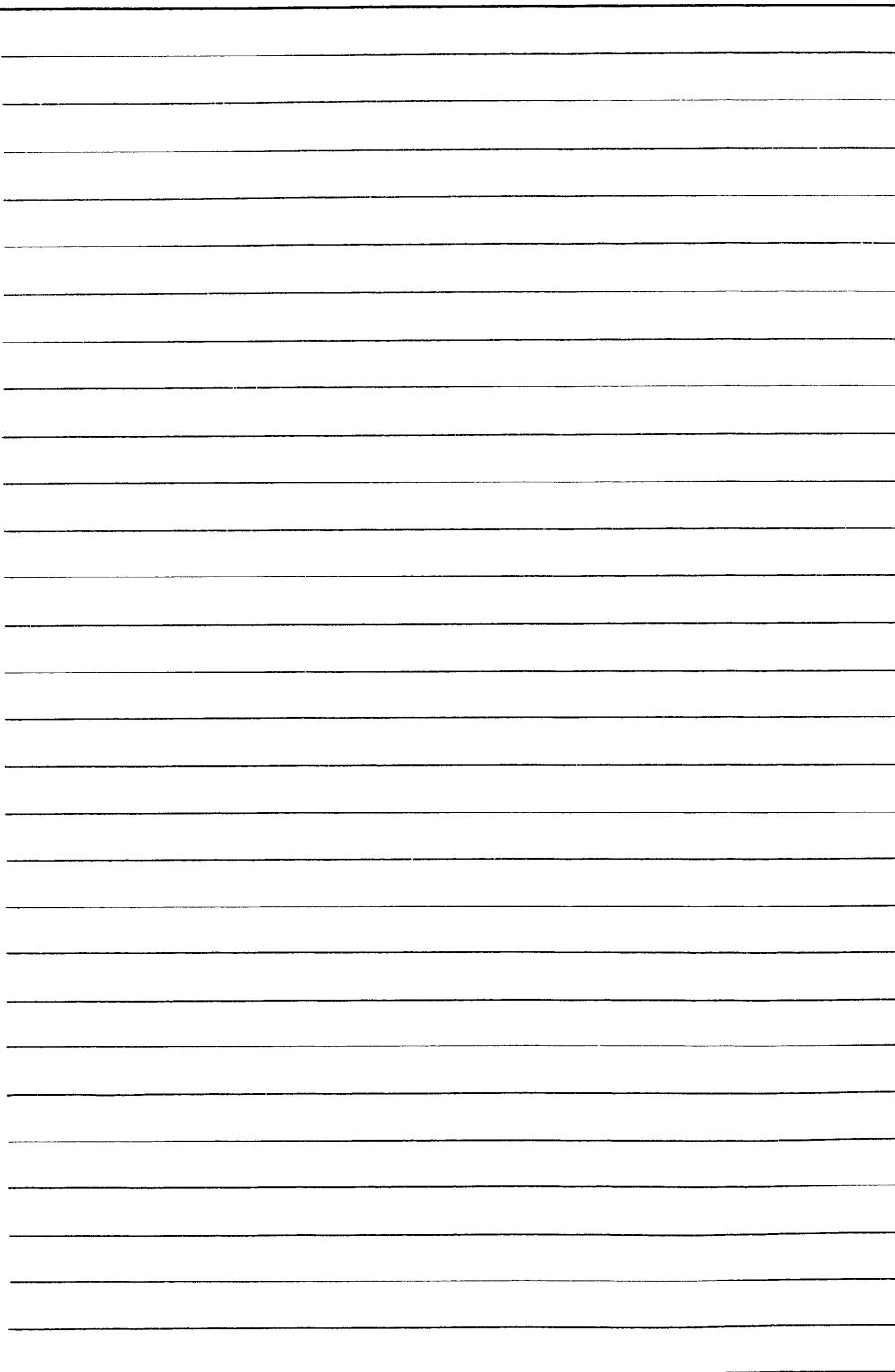
PRODUCT SAFETY NOTE: Components marked with a [△] have special characteristics important to safety. Before replacing any of these components, read carefully, the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

SYMBOL NO.	PART NO.	DESCRIPTION
C508	0246454	CD 39PF +-5% 50V
C509	0246446	CD 22PF +-5% 50V
C510	0246450	CD 27PF +-5% 50V
C511	0277019	PF 0.033MF +-10% 50V
C512	0253066	EL 10MF 25V
C513	0248672	CD 33PF +-5% 50V
C514	0248684	CD 100PF +-5% 50V
C515	0253082	EL 1MF 50V
C517	0277013	PF 0.01MF +-10% 50V
C518	0244136	CD 270 PF+-10% 50V
C519	0244136	CD 270 PF+-10% 50V
C520	0244136	CD 270 PF+-10% 50V
C551	0248674	CD 39PF +-5% 50V
C552	0248674	CD 39PF +-5% 50V
C601	0292706	PP 1MF 25V
C602	0253082	EL 1MF 50V
C603	0277019	PF 0.033MF +-10% 50V
C604	0253457	EL 22MF 160V
C605	0253085	EL 4.7MF 50V
C606	0243504	CD 180PF +-10% 500V
C607	0253085	EL 4.7MF 50V
C608	0253290	EL 100MF 100V
C609	0244565	CD 470PF +100-0% 500V
C610	0244103	CD 1500PF +-10% 50V
C611	0253084	EL 3.3MF 50V
C612	0277019	PF 0.033MF +-10% 50V
C613	0277017	PF 0.022MF +-10% 50V
C614	0252532	EL 220MF 16V
C616	0277017	PF 0.022MF +-10% 50V
C701	0253066	EL 10MF 25V
C702	0253082	EL 1MF 50V
C703	0279211	PF 5600PF 50V
C704	0244111	CD 6000PF +-10% 50V
C705	0244136	CD 270 PF+-10% 50V
△ C707	0253086	EL 10MF 50V
C708	0299918	PP 0.022MF +-10% 200V
C709	0244501	CD 1000PF +-10% 500V
△ C710	0263037	CD 330PF +-10% 2.5KV
△ C711	0299993	PP 0.018MF DC630V
△ C712	0299993	PP 0.018MF DC630V
△ C713	0299994	PP 0.023MF +-5% 630V
C714	0277015	PF 0.015MF +-10% 50V
C715	0277021	PF 0.047MF +-10% 50V
△ C716	0299928	PP 0.15MF +-10% 210V
C717	0259842	EL 4.7MF 250V (IR)
C718	0277025	PF 0.1MF +-10% 200V
C719	0244501	CD 1000PF +-10% 500V
C720	0253055	EL 2200MF 16V
△ C721	0299928	PP 0.15MF +-10% 200V
RESISTORS		
R0001	0187075	CF 2.7K OHM +-5% 1/16W
R0002	0187089	CF 10K OHM +-5% 1/16W
R0004	0187089	CF 10K OHM +-5% 1/16W
R0005	0100001	CF 2.2 OHM +-5% 1/8W

SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION			
COILS								
L0101	2122253	LA AXIAL COIL	T0101	2162012	COIL 30KHZ			
L0201	2121706	PEAKING COIL 100MI ±10%	T401	2250391	SOUND OUTPUT TRANSFORMER			
L0208	2122234	LA AXIAL COIL	T420	2250391	SOUND OUTPUT TRANSFORMER			
L0209	2122248	LA AXIAL COIL 47 MICRON	T501	2141533	BAND PASS TRANSFORMER			
L0210	2120482	FILTER COIL 100MH 10%	T702	2261021	TRANS HORIZONTAL DRIVE			
L0212	2121706	PEAKING COIL 100MI ±10%	▲ T901	2271291	SWITCHING TRANSFORMER			
L0213	2121706	PEAKING COIL 100MI ±10%	▲ T902	2271301	DRIVE TRANSFORMER			
L0214	2121706	PEAKING COIL 100MI ±10%	▲ T904	2213521	R/C POWER TRANSFORMER			
L071	2141776	M7-D TYPE COIL	COMPOUND COMPONENTS					
L072	2122253	LA AXIAL COIL	CP201	2300073	SAM FILTER HN2063			
L101	2120482	FILTER COIL 100MH 10%	ME201	2142241	CERAMIC FILTER 4.5MHZ			
L202	2142061	S10-R MOLD IFT	MF401	2142901	CERAMIC FILTER 4.5MHZ			
L203	2122232	LA AXIAL COIL 2.7UH	MF402	2790881	CERAMIC FILTER			
L204	2142015	G TYPE MOLD IFT	M0001	2790841	CERAMIC FILTER CSB455EB			
L205	2142015	G TYPE MOLD IFT	FUSES					
L206	2122251	LA AXIAL COIL 68 MICRON	▲ F901	2720587	FUSE 4A			
L207	2122242	LA AXIAL COIL 15UH	MISCELLANEOUS					
L208	2122241	LA AXIAL COIL 12UH	DL351	2790901	1H DELAY LINE			
L209	2122253	LA AXIAL COIL	DL352	2163292	DELAY LINE			
L210	2122253	LA AXIAL COIL	▲ RL901	2640282	POWER RELAY			
L3001	2122253	LA AXIAL COIL	SG851	2340037	SPARK GAP			
L3002	2122253	LA AXIAL COIL	▲ SP451	2412071	SPEAKER 100X100MM			
L3003	2120482	FILTER COIL 100MH 10%	▲ SP452	2412071	SPEAKER 100X100MM			
L304	2122248	LA AXIAL COIL 47 MICRON	SC201	2631722	KEY SWITCH			
L305	2122248	LA AXIAL COIL 47 MICRON	SC202	2631722	KEY SWITCH			
L306	2122249	LA AXIAL COIL 56UH	SC203	2631722	KEY SWITCH			
L351	2141148	1H DL COIL	SC204	2631722	KEY SWITCH			
L352	2121706	PEAKING COIL 100MI ±10%	SC205	2631722	KEY SWITCH			
L353	2141148	1H DL COIL	SC206	2631722	KEY SWITCH			
L401	2122251	LA AXIAL COIL 68 MICRON	SC207	2631722	KEY SWITCH			
L402	2122253	LA AXIAL COIL	SC208	2620671	SLIDE SWITCH			
L5001	2122253	LA AXIAL COIL	SC209	2631722	KEY SWITCH			
L5002	2120482	FILTER COIL 100MH 10%	SC210	2631722	KEY SWITCH			
L501	2122241	LA AXIAL COIL 12UH	SC211	2631722	KEY SWITCH			
L502	2122241	LA AXIAL COIL 12UH	SC212	2631722	KEY SWITCH			
L503	2122241	LA AXIAL COIL 12UH	SC222	2631722	KEY SWITCH			
L701	2122093	FILTER COIL	SC223	2631722	KEY SWITCH			
▲ L703	2162043	HORIZONTAL LINEARITY COIL	S151	2630771	PUSH SWITCH			
L851	2122254	LA AXIAL COIL 120 UH	S4001	2620193	SLIDE SWITCH			
▲ L901	2121672	FILTER COIL	V1	2353994	CPT A51JCC11X			
▲ L902	2121672	FILTER COIL	X0201	2795302	CRYSTAL 4.5MHZ			
L903	2122121	COIL	X501	2790441	CRYSTAL			
L906	2120489	FILTER COIL						
L907	2120489	FILTER COIL						
L908	2120482	FILTER COIL 100MH 10%						
▲ L910	2163055	DEGAUISING COIL						

PRODUCT SAFETY NOTE: Components marked with a ▲ have special characteristics important to safety. Before replacing any of these components, read carefully, the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
	0043209	TELESCOPIC ANTENNA		4159423	M3X12 SCREW FOR RC PWB W/WASHER
▲	2425441	TUNER ET-449		4263111	SPRING-SPEAKER PANEL
▲	2433702	FLYBACK TRANSFORMER		4280881	BATTERY TERMINAL (B-2)
▲	2442032	DEFLECTION YOKE		4280891	BATTERY TERMINAL (C-2)
	2582552	REMOTE CONTROL TRANSMITTER		4518372	SCREW-6X25MM
	2658893	CPT SOCKET		4518742	M2.3X12 PAN HEAD SCREW WITH WASHER
	2660413	PLUG		4518751	M2.3 NUT
	2661752	3P PIN PLUG WITH BASE		4521451	M2.6 BIND SCREW
	2661753	PLUG		4614001	WEDGE
▲	2742555	AC POWER CORD		4616791	SWITCH GUM
	2750283	ROD ANTENNA ASS		4770772	3 NUT
	2750341	LOOP ANTENNA SASS			
	2771831	C-F MAGNET			
	2771892	FERRITE BEADS CORE D04			
	2781282	BEAD BAND			
	2781692	WASHER YDIA			
	2782011	CENTER PIN			
	2783181	LEAD PIN			
	2784331	CPT SOCKET FOCUS COVER			
	2784505	FEEDER SET			
	2786281	MICA SHEET			
	2786301	TRS SHEET			
	3116733	CABINET WITH FRAME (HCPA)			
		(CT2000W)			
	3116731	CABINET WITH FRAME (HCPA)			
	3262442	KNOB-APS			
	3265801	SELECT BUTTON			
	3457081	BACK COVER ASS (HCPA)			
	3719342	CAHOE KIVET			
	3727972	HOLDER-AC LINE CORD			
	3738321	PLASTIC FOOT ASS			
	3738331	PIN-PLASTIC FOOT FIXING			
	3749161	ANTENNA HOLDER			
	3763751	SK.BINDER			
	3771501	KNOB PRESET			
	3772201	AC CORD HOLDER			
	3778101	CORD CASE			
	3778213	BATTERY LID			
	3778221	REMOTE CONTROL FILTER			
	3778492	R/C CASE (A)			
	3779031	KNOB-CHANNEL			
	3779041	VOLUME KNOB			
	3781032	DOOR-S			
	3781033	DOOR-W (CT2000W)			
	3781141	R/C CASE(B)			
	3781274	SIDE SPEAKER PANEL			
	3781275	SIDE SPEAKER PANEL(CT2000W)			
	4159412	3X12 TAPPING SCREW			
	4159421	M3X8 TAPPING SCREW			



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To receive original replacement parts, please contact your nearest HITACHI Parts Distributor or contact Hitachi Central Parts Warehouse listed below. Be sure to indicate part catalog number, part description and model number (located on back of product).

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